

ABSTRACT

A process for the production of electrical steel sheet cores for use in electrical equipment comprising the following steps:

- 5 a) applying of at least one coating layer of an aqueous composition onto the surface of the electrical steel sheet, the composition containing
- A) 100 parts per weight of one or more epoxy resin based on bisphenol-A-type, 100% of solids,
- 10 B) 1 to 25 parts per weight of dicyandiamide,
- C) 0.1 to 10 parts per weight of additives,
- D) 0.1 to 120 parts per weight of flow agent and
- E) 50 to 200 parts per weight of water,
- b) drying the applied layer under increased temperatures and
- 15 c) assembling of the coated electrical steel sheets to form a sheet core and bonding the sheets with each other by thermal curing of the coating;

the process according to the invention makes it possible to ensure a long service life of electrical equipment, such as motors and

20 transformers, by providing excellent self-adhesion of the coating and outstanding resistance to voltage fluctuations as well as high resoftening temperatures.